



*Tualatin Basin
Water Supply Project
and
Tualatin Project Title Transfer*

**Tom VanderPlaat,
Water Supply Project Manager**

Tualatin River Watershed



Sustaining Our Economy, Watershed and Community

**Tualatin Basin
Water Supply Project**

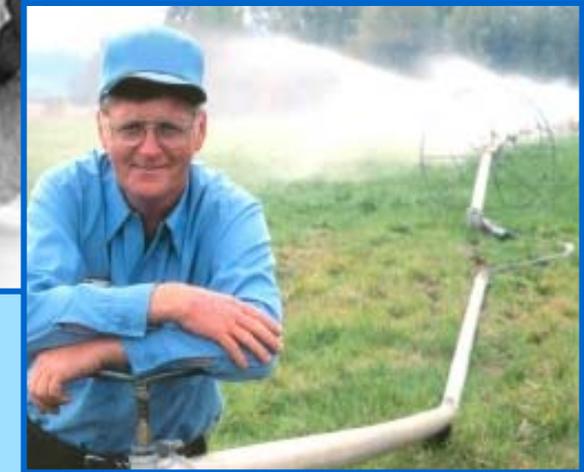
Water Management Systems

Major Users

Clean Water Services

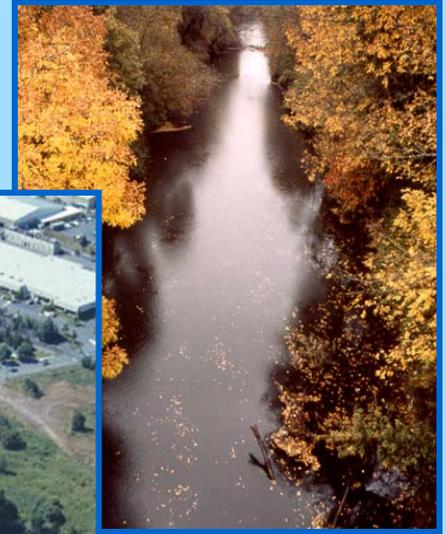
Municipal Water

Agriculture



Future Water Needs

- ▣ **Flow Restoration
– Water Quality**
- ▣ **Municipal and
Industrial use**
- ▣ **Agricultural**



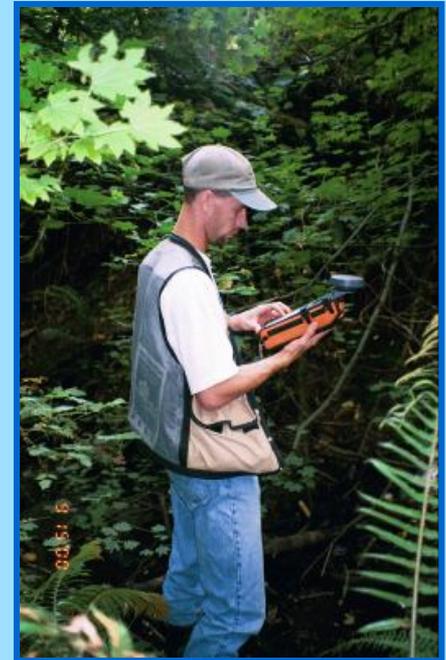
Flow Restoration

☐ Clean Water Act

- ☐ Water Quality Challenges
- ☐ Total Maximum Daily Loads – Pollutant Limits

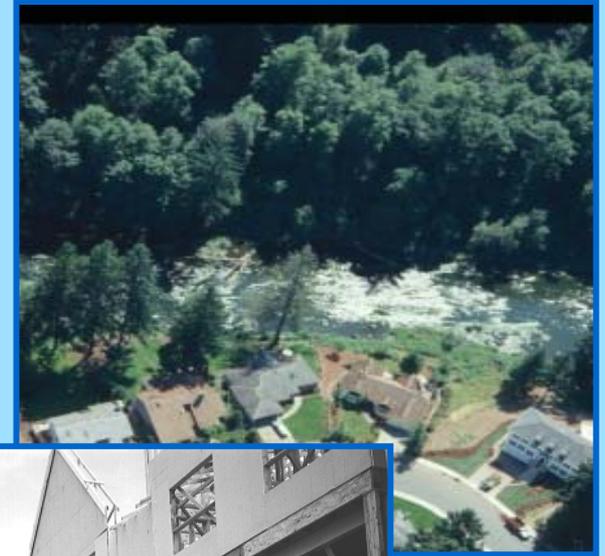
☐ Endangered Species Act

- ☐ Threaten Listing of Winter Steelhead



Municipal and Industrial Needs

- Future Demands
- Source water supplies for growing communities
- Climate change study



Agricultural Needs

Changing Cropping Patterns

- Conversion of annual row crops to nursery stock
 - Longer growing season
 - Higher volumes
 - Use occurs every year

Water quality exchanges

- Conversion from stream diversions to other sources via pipeline systems.



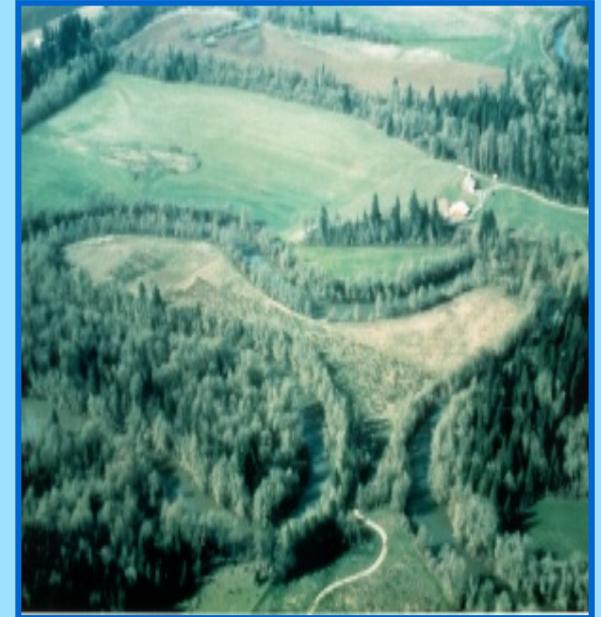
Benefits

- **Broader representation for small and large jurisdictions**
- **Expand the awareness of needs for various water users**
- **Promote an integrated watershed approach to water resources management**



Benefits (Continued)

- **Provide an opportunity for future partnering opportunities**
- **Combine political and financial resources needed for large water projects**
- **Strengthen communication between water resources management agencies**



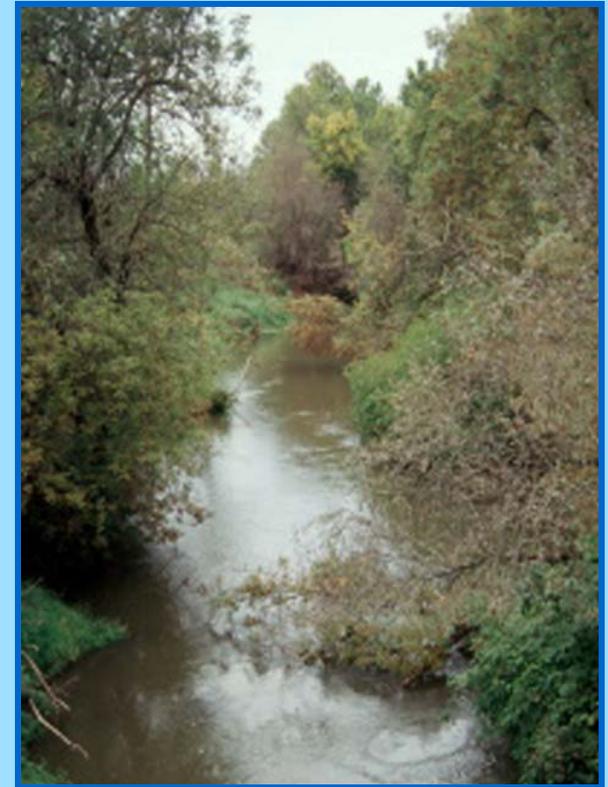
Challenges

- Development
- Trust Factor
- Patience
- Meeting everyone's needs
- Jurisdictional



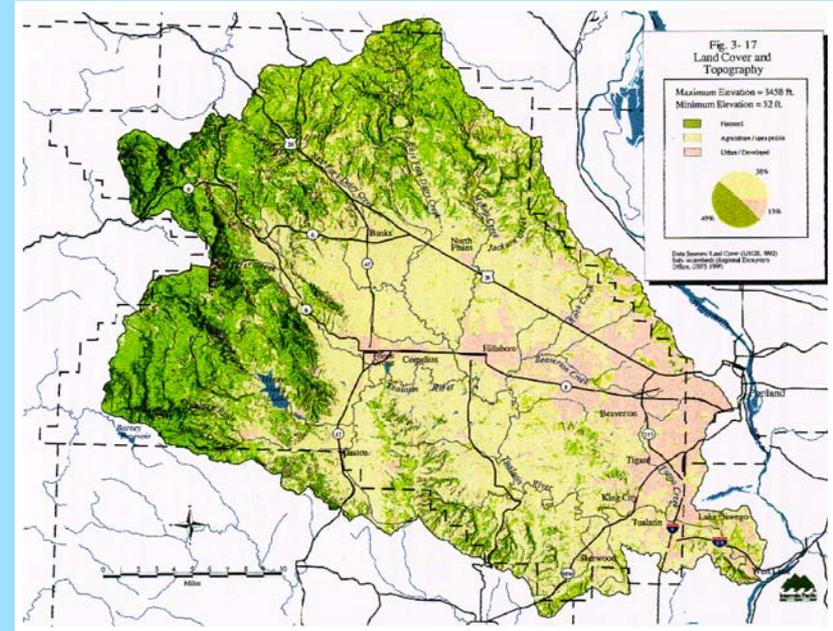
New Water Supplies Through Partnerships

- **Increase source water supplies**
- **Conservation**
- **Wastewater reuse**
- **Aquifer storage and recovery**
- **Water supply exchanges**
 - **Agricultural**
 - **M&I**
- **Regional sources**



Water Supply Project Partners

- ▣ **Clean Water Services**
- ▣ **Tualatin Valley Water District**
- ▣ **City of Beaverton**
- ▣ **City of Hillsboro**
- ▣ **City of Forest Grove**
- ▣ **U.S. Bureau of Reclamation**

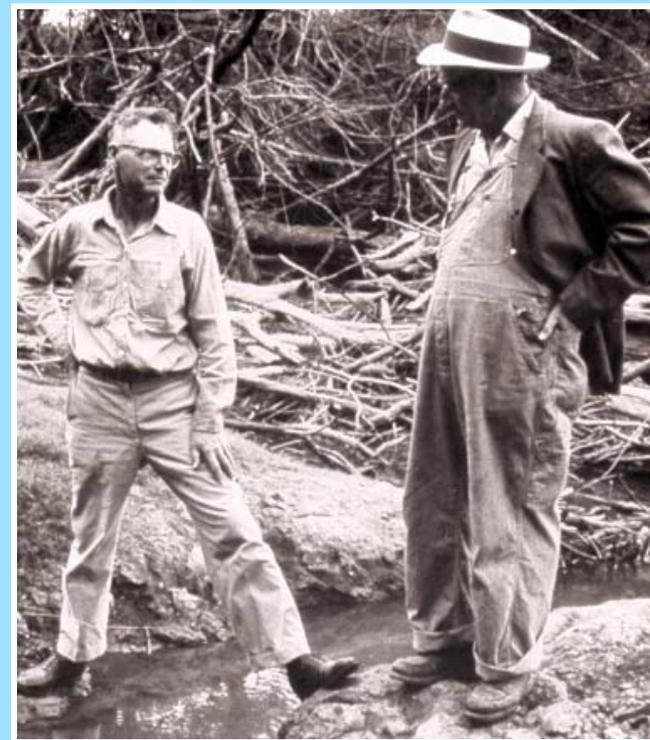


❖ Other Water Managers:

- Lake Oswego Corporation
- Tualatin Valley Irrigation District
- Washington County
- Cities of Banks, Cornelius & North Plains, Sherwood, Tualatin, and Tigard

Purpose:
**Evaluate Water Supply Options to
Meet Long-term Multiple Needs**

- ▣ **Instream flow restoration
15,000 acre-ft (18,502,200 m³)**
- ▣ **Municipal supply
37,000 acre-ft (45,638,760 m³)**
- ▣ *Total Need 52,000 acre-ft
(64,140,960 m³)*



Planning Report/Draft Environmental Statement - Alternatives

Alternative 1 – No Action

- What happens if we do nothing?**

Alternative 2 – Dam Raise/Replacement Option

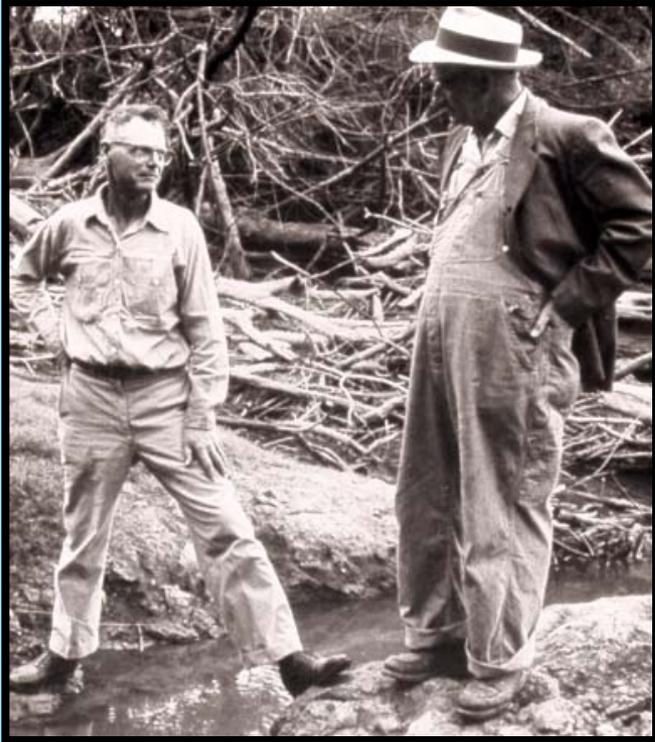
- 40' (12.2 m) raise/replacement of Scoggins Dam/Hagg Lake and Raw Water Pipeline Pump back**

Alternative 3 – Multiple Source Option

- 25' (7.6 m) raise/replacement of Scoggins Dam/Hagg Lake with Raw Water Pipeline Pump-back**

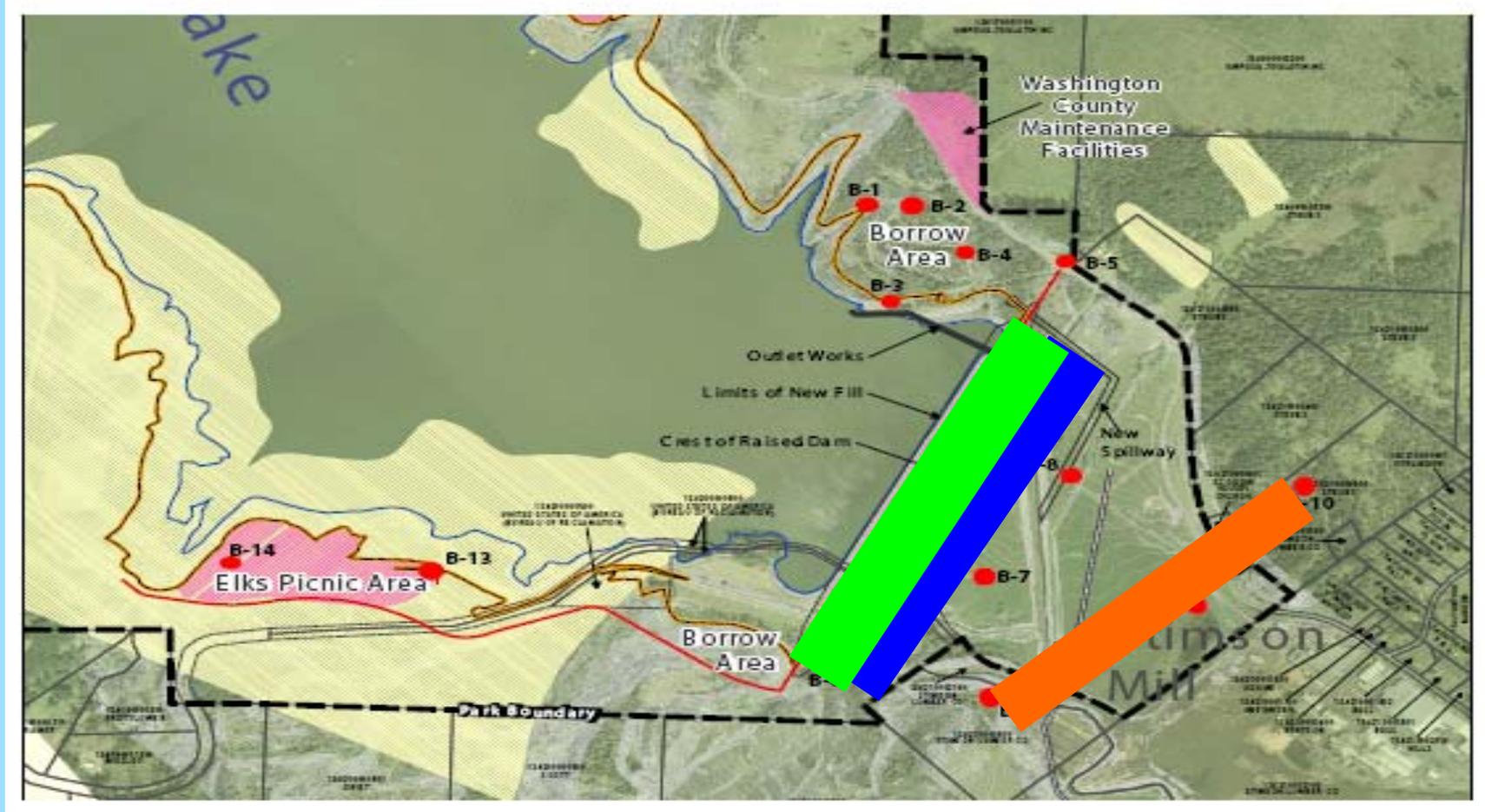
- Willamette River Water Treatment Plant expansion and Transmission Pipeline**

Impact Analysis of Alternatives



- **Private property impacts**
- **Wetlands**
- **Wildlife (Elk)**
- **Water quality**
- **Hydrology**
- **Fish habitat**
- **Recreation**
- **Others (social, cultural...)**

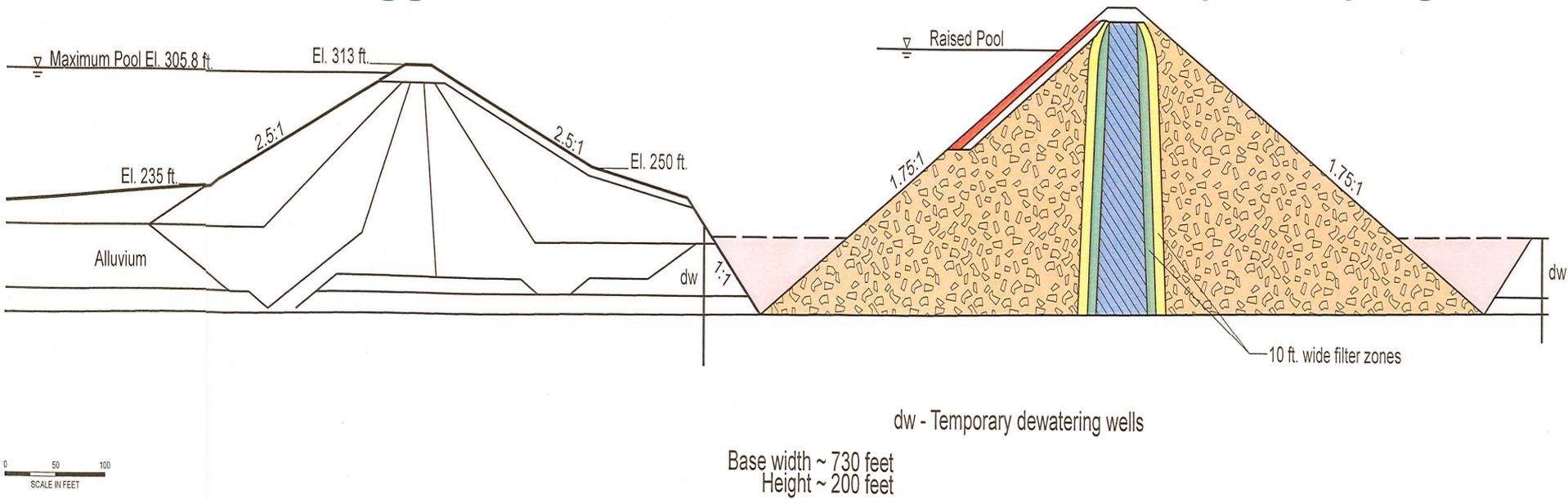
Dam Design Options



Dam Raise - Downstream options

Scoggins Dam

New Dam – 40 ft (12.2 m) higher



- **Material Volumes – 5.8 to 13.8 million yards (4.4 to 10.6 million m³)**

Construction Cost Estimate for Raises



☰ 40' (12.2 m) raise = \$263 M

- +52,000 acre-ft (64,140,960 m³)
- Raw Water Pipeline = \$84 M
- Pump Back = \$40 M

☰ 25' (7.6 m) raise = \$238 M

- +28,000 Acre-ft (34,537,440 m³)
- Raw Water Pipeline = \$63 M
- Pump Back = \$25 M

Tualatin Project Title Transfer



Tualatin Project Title Transfer
Exploring local ownership for improved water management

Existing Tualatin Project Contractors



- **Contractor and % share
Hagg Lake**
 - ✓ **Tualatin Valley Irrigation District – 54.5 %**
 - ✓ **Clean Water Services – 24.9%**
 - ✓ **City of Hillsboro – 7.4%**
 - ✓ **City of Forest Grove – 6.6%**
 - ✓ **City of Beaverton – 5.9%**
 - ✓ **Lake Oswego Corporation – 0.7%**
 - ✓ **Washington County Facilities – TBD%**

General Policies

- **Transaction Costs Must Be Shared**
 - **50/50 for NEPA process**
 - **100% Non-Federal For “Real Estate” Aspects**
- **Local entity must assume liability of the Facilities**
- **Valuation - U.S. Treasury Must Remain “Whole.”**
 - **Must Account for Revenue Streams (Through Contracts and Other Sources of Payment) that would come to the U.S, absent a transfer.**

Tualatin Project Title Transfer

Exploring local ownership for improved water management

What's Transferred

■ **Transferred elements:**

- **Tualatin Project facilities**
- **Land and water rights and easements**
- **Operation and maintenance responsibilities**
- **Legal liability**
- **Regulatory requirements**
- **Dam Safety element**



Tualatin Project Title Transfer
Exploring local ownership for improved water management

Why Title Transfer?

- ✓ **Local Capacity and Capability**
- ✓ **Flexibility of managing and coordinating resources**
- ✓ **Efficiency of operation**
- ✓ **Cost and schedule savings for potential dam raise construction**

Tualatin Project Title Transfer

Exploring local ownership for improved water management

Local Work in Progress

- **Local MOA; no final agreements signed, among local partners**
- **Foundation of good working relationships throughout Washington County; history of coordinating management of water supplies**
- **Building local support**
 - **Governing bodies**
 - **Interest groups**
 - **Resource agencies**
- **Building support with Congressional delegation**

Tualatin Project Title Transfer

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